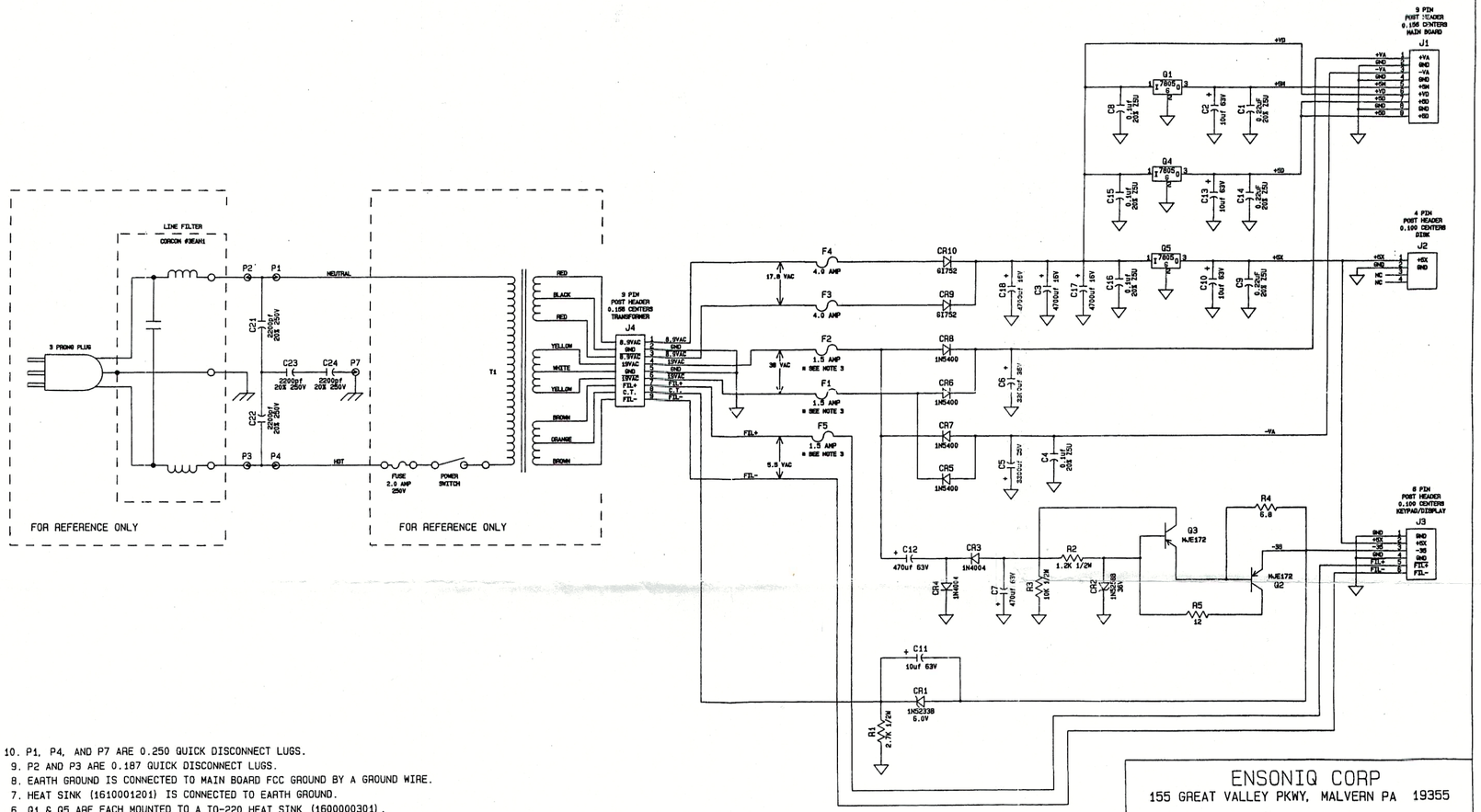
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE	11-26-91	SBK
A	PRODUCTION RELEASE	3/24/92	SBK



10. P1, P4, AND P7 ARE 0.250 QUICK DISCONNECT LUGS.
9. P2 AND P3 ARE 0.187 QUICK DISCONNECT LUGS.
8. EARTH GROUND IS CONNECTED TO MAIN BOARD FCC GROUND BY A GROUND WIRE.
7. HEAT SINK (1610001201) IS CONNECTED TO EARTH GROUND.
6. Q1 & Q5 ARE EACH MOUNTED TO A TO-220 HEAT SINK (1600000301).
5. Q4 IS MOUNTED TO A DIE CAST HEAT SINK (1610001201).
4. F3 & F4 ARE 4.0AMP, 250V, 5 X 20mm.
3. F1, F2 & F5 ARE 250V, 5 X 20mm.
   WHEN UL FUSES ARE USED, THEY ARE 1.5AMP.
   WHEN IEC FUSES ARE USED, THEY ARE 1.0AMP.
2. ALL CAPACITORS VALUES ARE IN MICROFARADS.
1. ALL RESISTORS VALUES ARE IN OHMS, 1/4W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

NOV 22 1995

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

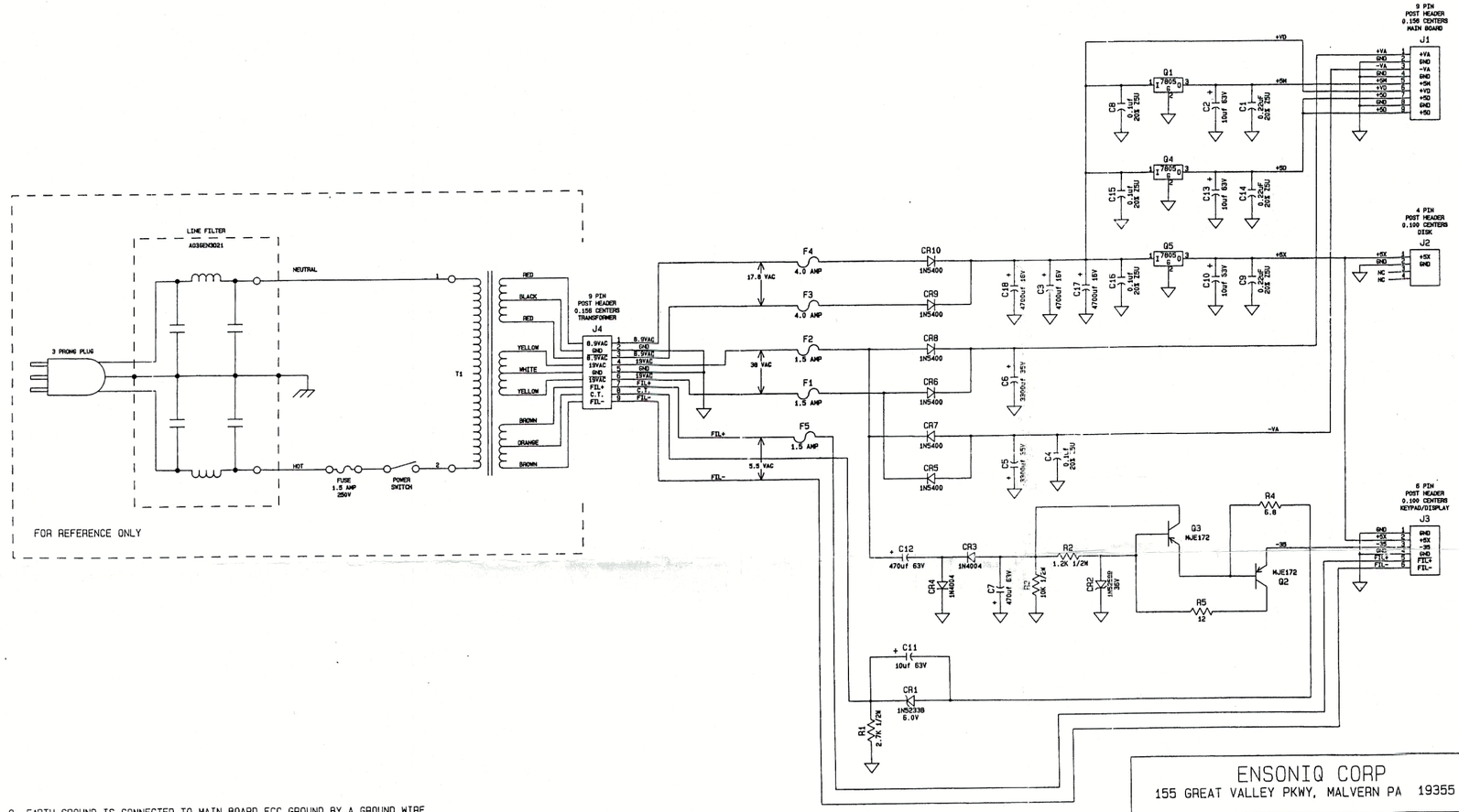
APPROVALS	DATE
DRAWN BY: SJH	11-21-91
CHECKED BY:	
APPROVED BY:	
USED ON: EPS-16+ / EPS-16+R	

PCB SCHEMATIC
POWER SUPPLY W/CAPS
EPS-16+ / EPS-16+R

SIZE	DWG. NO.	REV
D	4010014901	A

SCALE — SHEET 1 OF 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE	07-16-90	AKS
A	PRODUCTION RELEASE PER EDR 42-138	08-02-90	AKS
B	REVISED PER ECO 2194		



8. EARTH GROUND IS CONNECTED TO MAIN BOARD FCC GROUND BY A GROUND WIRE.
7. HEAT SINK (1610001201) IS CONNECTED TO EARTH GROUND.
6. Q1 & Q5 ARE EACH MOUNTED TO A TO-220 HEAT SINK (1600000301).
5. Q4 IS MOUNTED TO A DIE CAST HEAT SINK (1610001201).
4. F3 & F4 ARE 4.0AMP, 250V, 5 X 20mm.
3. F1, F2 & F5 ARE 1.5AMP, 250V, 5 X 20mm.
2. ALL CAPACITORS VALUES ARE IN MICROFARADS.
1. ALL RESISTORS VALUES ARE IN OHMS, 1/4W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

NOV 2 2 1990

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

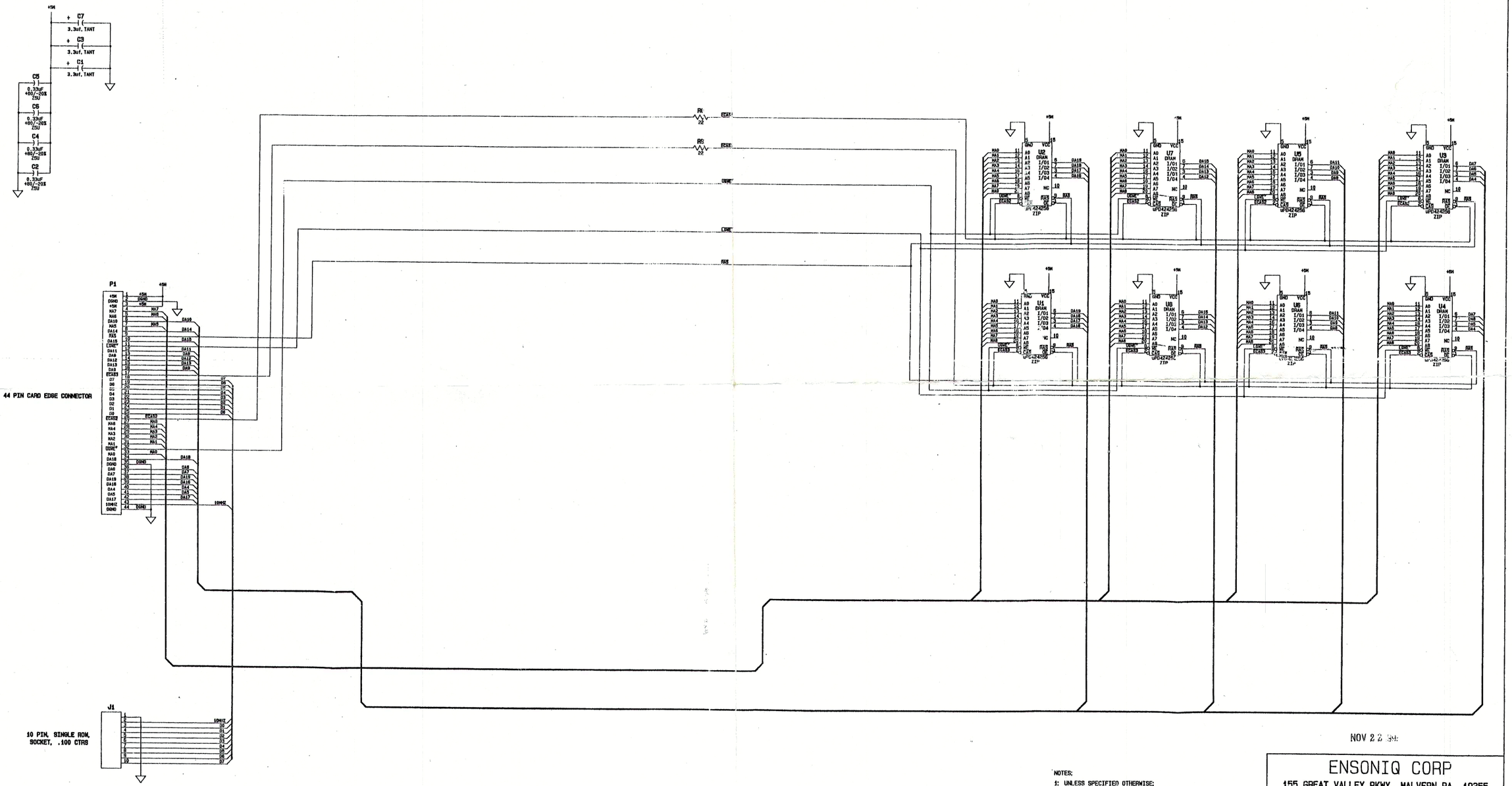
APPROVALS	DATE
DRAWN BY: SJH	07-16-90
CHECKED BY:	
APPROVED BY:	
USED ON: EPS-16+	

PCB SCHEMATIC
POWER SUPPLY BOARD
EPS-16+

SIZE	DWG. NO.	REV
D	4010013701	B

SCALE — SHEET 1 OF 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	1-6-90	AKJ

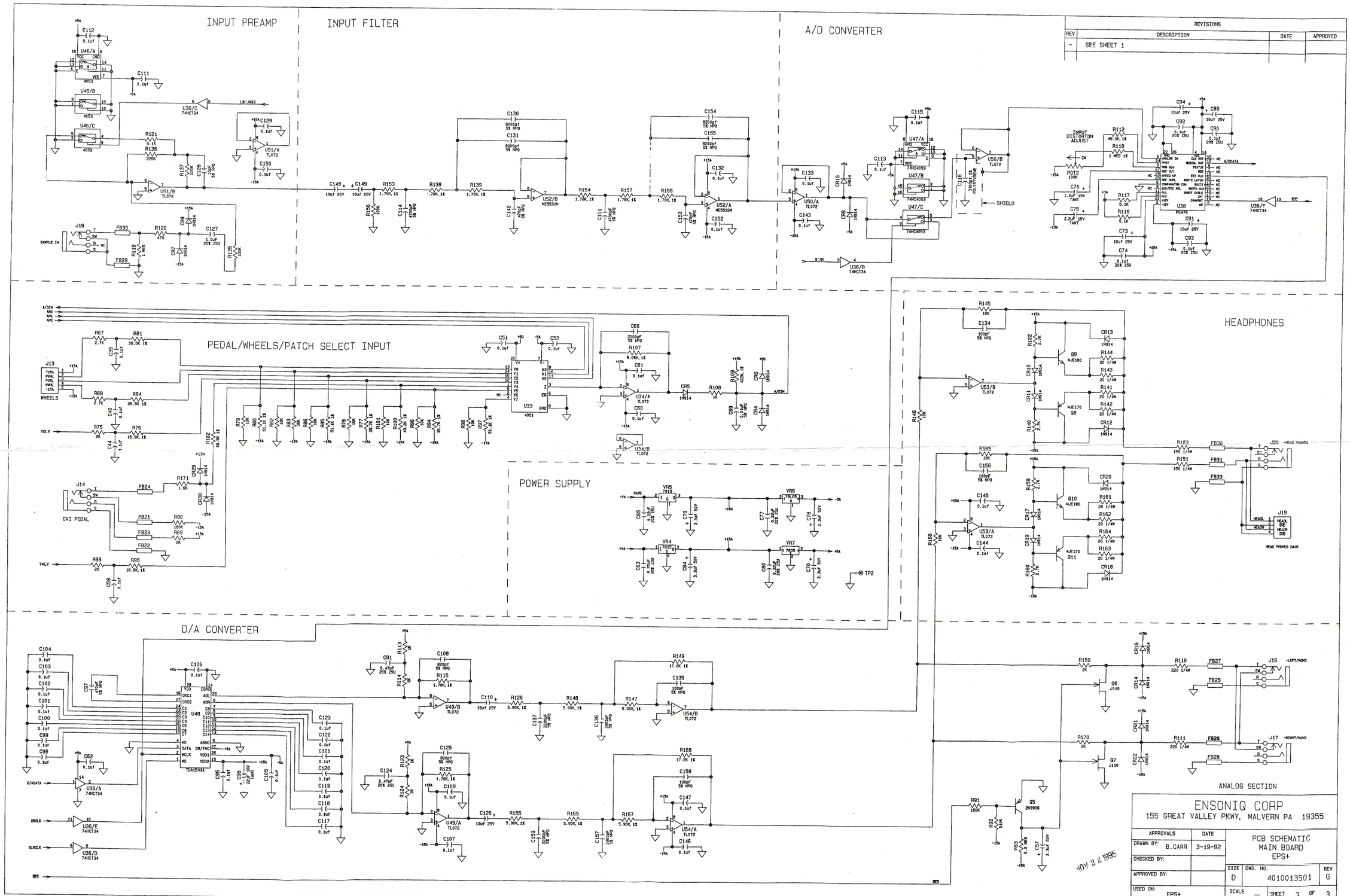


NOV 2 2 '89

NOTES:
1: UNLESS SPECIFIED OTHERWISE:
ALL RESISTOR VALUES ARE IN OHMS, 1/8W, 5%.
ALL CAPACITOR VALUES ARE IN MICROFARADS.

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

APPROVALS	DATE	PCB SCHEMATIC 2X MEMORY EXPANDER BOARD		
DRAWN BY: DAVL III	02-26-90			
CHECKED BY:				
APPROVED BY:		SIZE D	DWG. NO. 4010013801	REV A
USED ON: EPS +		SCALE —	SHEET 1 OF 1	


INPUT PREAMP
INPUT FILTER
A/D CONVERTER
PEDAL/WHEELS/PATCH SELECT INPUT
POWER SUPPLY
HEADPHONES
D/A CONVERTER
ANALOG SECTION
REVISIONS
REV
DESCRIPTION
DATE
APPROVED
- SEE SHEET 1
ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355
APPROVALS
DATE
DRAWN BY: B.CARR 3-19-92
CHECKED BY:
APPROVED BY:
USED ON: EPS+
PCB SCHEMATIC
MAIN BOARD
EPS+
SIZE D
DWG. NO. 4010013501
REV G
SCALE —
SHEET 3 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE		
B	REVISED PER ECO 2183	9/7/9-	JJ

BUS 3

BUS 2

AUX.

NOTE: DO NOT SUBSTITUTE WITH 1/8W.

NOTE: IN THE STAND ALONE OEX-8, J1 IS NOT USED. WHEN THIS BOARD IS USED IN THE EPS-16+ RACK MOUNT UNIT, J1 IS USED INSTEAD OF J2.

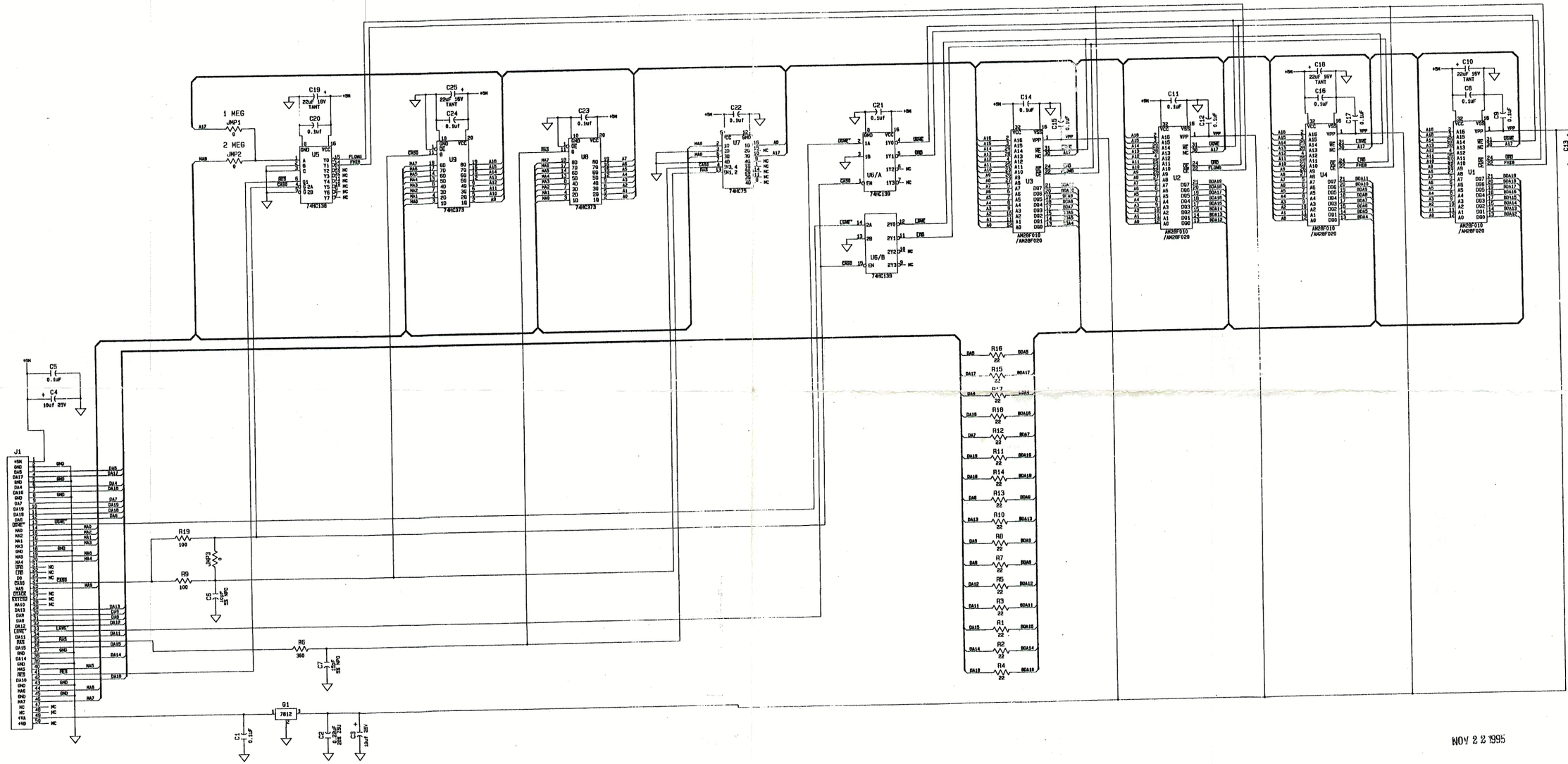
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 16V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

NOV 2 2 1995

ENSONIQ CORP			
155 GREAT VALLEY PKWY, MALVERN PA 19355			
APPROVALS	DATE	PCB SCHEMATIC OEX-6 EPS16+	
DRAWN BY: B.CARR	9-6-90		
CHECKED BY:		SIZE D	DWG. NO. 4010013901 REV B
APPROVED BY:			
USED ON: EPS16+		SCALE —	SHEET 1 OF 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE	08-09-90	AKS
A	PRODUCTION RELEASE PER EDR 42-162	11-6-90	AKS



NOV 22 1995

5. FOR FB-2 U1, U2, U3 AND U4 ARE 28F020-150 AND JMP2 IS INSTALLED.
4. FOR FB-1 U1, U2, U3 AND U4 ARE 28F010-150 AND JMP1 IS INSTALLED.
3. R19 AND C6 ARE NOT TO BE ASSEMBLED UNTIL NOTIFIED BY AN ECO.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 16V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

APPROVALS	DATE
DRAWN BY: SJH	08-08-90
CHECKED BY:	
APPROVED BY:	
USED ON: EPS-16+	

PCB SCHEMATIC
FLASH EXPANDER
EPS-16+

SIZE	DWG. NO.	REV
D	4010013401	A

SCALE — SHEET 1 OF 1

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE PER EDR 42-139	08-02-90	AKS
B	REVISED PER ECO 2188	09-14-90	AKS
C	REVISED PER ECO 2209	10-09-90	AKS
D	REVISED PER ECO 2227	3/21/91	

5K POT: DO NOT USE - R58, R59, R60, R61, R63, R64, R65, R66, R67, R69, C13, C15, C16, C17, CA1, CA2, CA3, CA4, U7.
USE - JMP1, JMP2.

50K POT: DO NOT USE - R63, R69, JMP1, JMP2, C13, C15, C16, C17, CA1, CA2, CA3, CA4.
USE - R58, R59, R60, R61, R64, R65, R66, R67, U7.

SEE NOTE 5

FIP 22AMSR PINOUT

ENCODED KEY NUMBER = (COL * 6) + ROW

5. THESE COMPONENTS ARE OPTIONAL DEPENDING ON WHAT SLIDE POTS ARE USED. REFER TO THE PCB ASSY BOM FOR WHAT COMPONENTS ARE POPULATED.
4. IC 58341 IS INTERCHANGABLE WITH 58241.
3. ALL 0.1uf BYPASS CAPACITORS ARE 50V +80/-20% Z5U.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 50V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

NOV 2 2 1990

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

APPROVALS	DATE	PCB SCHEMATIC KEYPAD/DISPLAY BOARD EPS-16+		
DRAWN BY: B.CARR	10-26-90			
CHECKED BY:		SIZE: D	DWG. NO.: 4010007302	REV: D
APPROVED BY:				
USED ON: EPS-16+		SCALE: —	SHEET 1 OF 1	

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE		AKS
A	PRODUCTION RELEASE		AKS
B	REVISED PER ECO 2181	9-7-90	AKS
C	REVISED PER ECO 2205	10-11-90	AKS
D	REVISED PER ECO 2229	12-19-90	AKS
E	REVISED PER ECO 2299	4-30-91	AKS
F	REVISED PER ECO 2382	7-11-91	AKS
G	REVISED PER ECO 2520	3-13-92	AKS

MEMORY EXPANDER

NON VOLATILE MEMORY EXPANSION

MEMORY SECTION

3. ALL 0.1UF BYPASS CAPACITORS ARE 50V +80/20% Z5U.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 16V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

10V 3.3 1991

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

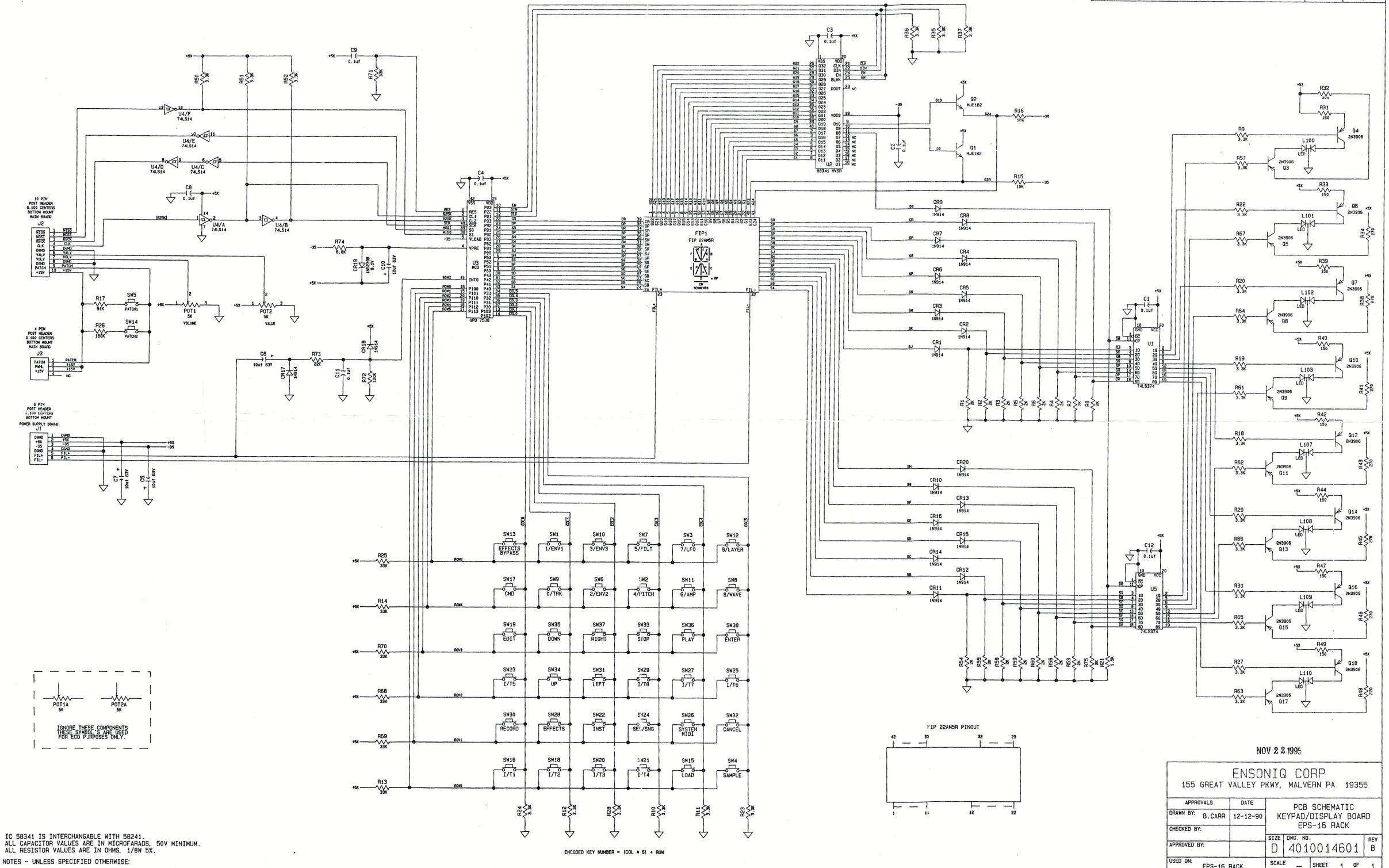
APPROVALS	DATE
DRAWN BY: B.CARR	3-19-92
CHECKED BY:	
APPROVED BY:	
USED ON: EPS+	

PCB SCHEMATIC
MAIN BOARD
EPS+

SIZE	DWG. NO.	REV
D	4010013501	G

SCALE — SHEET 1 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE		
A	PRODUCTION RELEASE PER EDR 42-160	10-24-94	AKJ
B	REVISED PER ECO 2248	12-11-95	AKJ



3. IC 58341 IS INTERCHANGABLE WITH 58241.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 50V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS SPECIFIED OTHERWISE:

NOV 22 1995

ENSONIQ CORP
155 GREAT VALLEY PKWY, MALVERN PA 19355

APPROVALS	DATE	PCB SCHEMATIC KEYPAD/DISPLAY BOARD EPS-16 RACK		
DRAWN BY: B.CARR	12-12-90			
CHECKED BY:		SIZE D	DWG. NO. 4010014601	REV B
APPROVED BY:				
USED ON: EPS-16 RACK		SCALE —	SHEET 1 OF 1	

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	SEE SHEET 1		

R106 IS OPTIONAL

DIGITAL SECTION

ENSONIQ CORP

155 GREAT VALLEY PKWY, MALVERN PA 19355

APPROVALS	DATE
DRAWN BY: B.CARR	3-19-92
CHECKED BY:	
APPROVED BY:	
USED ON: EPS+	

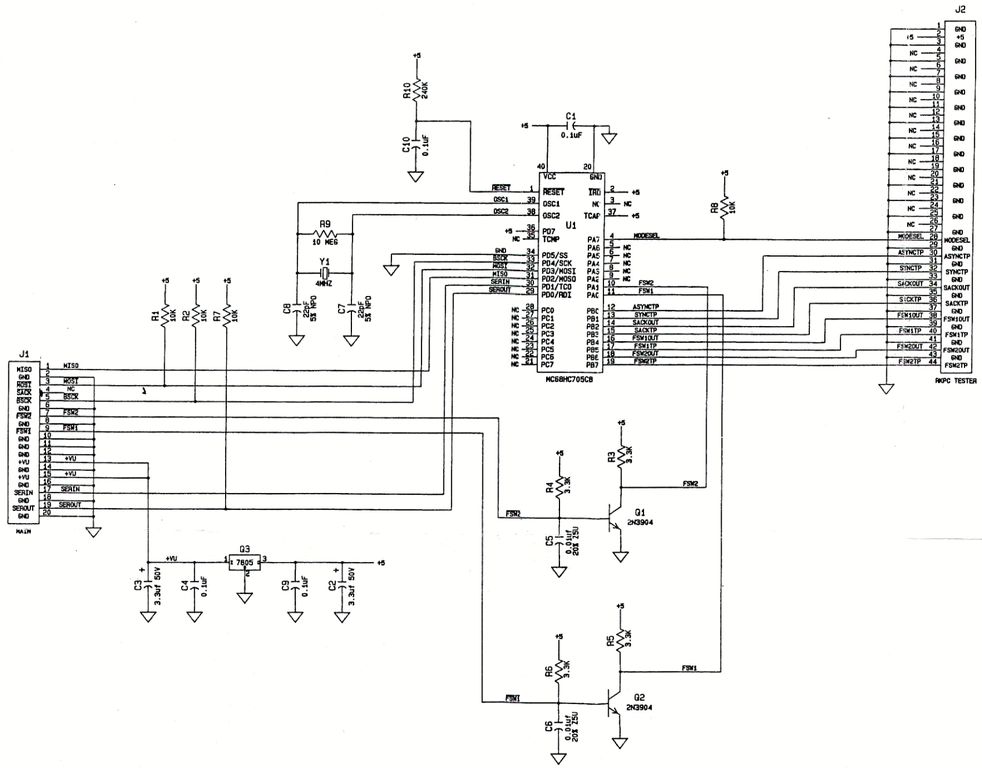
PCB SCHEMATIC
MAIN BOARD
EPS+

SIZE	DWG. NO.	REV
D	4010013501	G

SCALE — SHEET 2 OF 3

MAY 2 2 1992

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	PROTOTYPE RELEASE	10-2-90	
1	PRODUCTION RELEASE PER EDR 42-159	10-18-90	



NOV 2 2 1995

3. ALL 0.1UF BYPASS CAPACITORS ARE 50V +80-20% Z5U.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS, 16V MINIMUM.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/8W 5%.

NOTES - UNLESS OTHERWISE SPECIFIED:

ENSONIQ CORP 155 GREAT VALLEY PKWY, MALVERN PA 19355			
APPROVALS	DATE	PCB SCHEMATIC KPC SIMULATOR EPS-16+RACK	
DRAWN BY: SJH	10-02-90		
CHECKED BY:		SIZE: D	DWG. NO.: 4010013601
APPROVED BY:			REV: 1
USED ON: EPS-16+R		SCALE: —	SHEET 1 OF 1